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**Assignment 7**: Report on an important hydroelectric power plant. Discuss specific details like when it was built, how much it cost, how much energy it produces, who runs it, who it serves, what environmental impacts it has and so forth. This is a suggested list of things to include, but it is not exhaustive. Please be as detailed as possible and write this yourself. DO NOT copy and paste from a web page, unless you are quoting small sections. INCLUDE ALL REFERENCES!

**Bonneville Dam**

The Bonneville Dam is located in Washington state functioning on the Columbia River. The construction of the dam began in 1934 of the first power house. The construction consisted of two separately built power houses. The second power house was built 40 years later dated at 1974. The Dam primarily produced electrical energy which was routed to provide energy to the public. The construction of it ran to about $341 million dollars but in the end became very successful. The combined electrical output of the two power houses at Bonneville now generates over 1 million kilowatts mainly to the additional second power house. The owners of the dam are the U.S. Army Corps of Engineers.

The dam produces these energies by a working of 20 turbines. The function starts with a reservoir which stores a lot of water then passing through the intake and at last going through a Penstock which gravity pressures the water down making the water spin the turbine propellers and running the generators therefore producing the available energy. The dam also had some environmental impacts. The efficient method for producing this energy at Bonneville also had its drawbacks. The dam blocked the wide migration of white sturgeon. The sturgeons spawning ground was mainly upstream where they can have healthy spawning population. Which then engineers found ways to help the wide migration of fish in the dam. They built fish ladders to help wild salmon and steelheads get pass it and go upstream to their spawning areas. The dam was built with federal money. The Franklin D. Roosevelt admin wanted the power distributed amongst the people and to private ownerships. Of course by 1937, the Bonneville project act was signed by Roosevelt basically giving the power of the dam to the people thus creating the (BPA) the Bonneville Power Administration.

Works Cited

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